#### REMARKS

#### A. Objection to Drawings

In the Office Action of November 3, 2005, the drawings were objected to because the recited first set of magnetic elements that are each non-integral with respect to and arranged laterally next to the first non-magnetizable support of claims 1, 11 and 14. Claim 1 has been canceled and claims 11 and 14 have been amended so as to delete the phrase "each non-integral with respect to and" so that the claims substantially correspond their originally filed form with respect to the clauses at issue. Since the drawings were not objected to for not showing the elements recited in original claims 1, 11 and 14, the objection should be withdrawn.

#### B. Objection to Claims

Claims 17, 20, 25, 27, 30, 31, 34, 39 and 42 were objected to because of various informalities. In particular, claims 17, 20, 25, 27, 30, 39 and 42 were objected to for using the word "injected" instead of "injection." In view of the present amendments to claims 17, 20, 25, 27, 30, 31, 34, 39 and 42 which changes the offending word to read as "injection" the objection has been overcome and should be withdrawn.

Since the amendments of claims 17, 20, 25, 27, 30, 39 and 42 correct an obvious error and do not change the intended meaning or scope of the claims, the amendments are not being made for reasons related to patentability as defined in *Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd*, 234 F.3d 558, 56 USPQ2d 1865 (Fed. Cir. 2000) (*en banc*), *overruled in part*, 535 U.S. 722 (2002) (hereinafter *Festo I*).

Claims 31 and 34 were objected to because it was unclear as to the difference between the first, second, third and fourth rings of claim 31 when compared with the first set of tracks of

claim 34. Applicants traverse the objection in that claim 31 is clear that the non-magnetizable supports form first and third rings and the first and second set of magnetizable elements define second and fourth rings concentric with the first and third rings. Claim 34 recites that the first set of magnetic elements are arranged on a first set of tracks. Since it is not contradictory for the first set of magnetic element to define a ring and to be arranged on a set of tracks, the claims are clear in meaning and the objection should be withdrawn.

#### C. 35 U.S.C. § 112, First Paragraph

Claims 1-30 were rejected under 35 U.S.C. § 112, first paragraph, because the phrase "a first set of magnetic elements that are each non-integral with respect to and arranged laterally next to said first non-magnetizable support" as recited in independent claims 1, 11 and 14 is not supported by Applicants' original disclosure. In view of the cancellation of claims 1 and 4, their rejections along with their corresponding dependent claims 2, 3, 5-10 and 16-20 have been rendered moot. Note that claim 5 has been amended so as to be in independent form and it does not include the offending phrase. Regarding the rejection of claims 11-15 and 21-30, the deletion of the offending phrase from claims 11 and 14 overcomes the rejection and so the rejection should be withdrawn.

As mentioned above, claim 5 has been placed in independent form. To the extent that the amendment incorporates subject matter that was inherently present in claim 5 previously, the amendment is not related to patentability. See, Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd, 535 U.S. 722 (2002).

#### D. 35 U.S.C. § 102

#### 1. Claims 1-7, 10 and 16-20

Claims 1-7, 10 and 16-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Spies. Claims 1 and 4 have been canceled and so their rejections have been rendered moot. Regarding the rejection of claim 5, Applicants traverse the rejection. Claim 5 recites that the first set of magnetic elements are on a first set of tracks that are spaced apart from one another. In other words, there are two or more tracks spaced from one another, wherein each track has one or more of the first set of magnetic elements. In addition, each of the first set of magnetic elements is constrained to be arranged laterally next to the first non-magnetizable support as recited in claim 5. In contrast, Spies shows in Fig. 5 at most one track of magnetic elements that is arranged laterally next to each of the base bodies 60, 70. Those magnetic elements are arranged on the outer circumferences of the base bodies. While there are magnetic elements arranged interiorly of each base body, 60, 70, those magnetic elements are arranged on the interior surface of the base body. This is confirmed by examining the top base body 70 shown in Fig. 5. In particular, the top surface of the base body 70 overlies top surfaces of the interior magnetic elements and so the interior magnetic elements are not laterally arranged next to the base body 70. Since Spies does not disclose two or more tracks with magnetic elements laterally arranged in the manner recited in claim 5, the rejection is improper and should be withdrawn.

Besides not being anticipated by Spies, claim 5 is not rendered obvious by Spies since there is no suggestion to alter Spies so that its interior magnet elements for a based body are arranged laterally to the base body. In the case of base body 70, such an alteration would require forming openings in the top surface of base body 70 and then placing the interior magnetic

elements in the openings. Furthermore, there is no disclosure in Spies how such interior magnetic elements would be attached to the base body. Accordingly, claim 5 and its dependent claims are patentable over Spies.

Note that claims 2, 3, 7, 10 and 16 have been amended so as to depend from claim 5 in order to provide additional coverage for the scale of claim 5. Accordingly, the amendments are not being made for reasons related to patentability as defined in *Festo I*.

## 2. <u>Claims 11-13 and 21-25</u>

Claims 11-13 and 21-25 were rejected under 35 U.S.C. § 102(b) as being anticipated by Spies. Claim 11 has been amended to clarify that "said first set of magnetic elements are arranged on a first set of tracks, wherein said first set of tracks, viewed vertically with respect to said measuring direction, are arranged spaced apart from each other by a space, and wherein said first non-magnetizable support and said second non-magnetizable support are arranged in at least said space; and wherein said first set of tracks are concentric with one another and said first and second non-magnetizable supports are arranged in the form of concentric rings between two of said first set of tracks." For reasons similar to those given above in Section D.1 with respect to claim 5, claim 11, as amended, is not anticipated by Spies. Accordingly, the rejection has been overcome and should be withdrawn.

Besides not being anticipated by Spies, claim 11 is not rendered obvious by Spies since there is no suggestion to alter Spies so that its interior magnet elements for a based body are arranged laterally to the base body.

Note that claim 25 has been amended so as to depend from claim 24 instead of claim 19 in order to correct an obvious typographical error. Accordingly, the amendment is not being

made for reasons related to patentability as defined in Festo I.

# 3. Claims 14, 15 and 26-30

Claims 14, 15 and 26-30 were rejected under 35 U.S.C. § 102(b) as being anticipated by Spies. Claim 14 has been amended to clarify that "said first set of magnetic elements are arranged on a first set of tracks, wherein said first set of tracks, viewed vertically with respect to said measuring direction, are arranged spaced apart from each other by a space, and wherein said first non-magnetizable support and said second non-magnetizable support are arranged in at least said space and wherein said first set of tracks are concentric with one another and said first and second non-magnetizable supports are arranged in the form of concentric rings between two of said first set of tracks." For reasons similar to those given above in Section D.1 with respect to claim 5, claim 14, as amended, is not anticipated by Spies. Accordingly, the rejection has been overcome and should be withdrawn.

Besides not being anticipated by Spies, claim 14 is not rendered obvious by Spies since there is no suggestion to alter Spies so that its interior magnet elements for a based body are arranged laterally to the base body.

#### 4. Claims 31-34

Claims 31-34 were rejected under 35 U.S.C. § 102(b) as being anticipated by Spies.

Claim 32 has been canceled rendering its rejection moot. Regarding Claim 31, it has been amended to recite a first set of magnetic elements that are arranged laterally next to a first non-magnetizable support and arranged to define a ring and a second set of magnetic elements that are arranged laterally next to a second non-magnetizable support and arranged to define a ring that is offset to and concentric with the ring defined by the first set of magnetic elements. As

mentioned above in Section D.1, only the outer magnetic elements of the base bodies 60, 70 could be considered to be laterally arranged with their respective base bodies. However, when base bodies 60 and 70 are attached to one another, the outer magnetic elements of each base body define rings that overlap one another and so are <u>not</u> offset from one another as required by claim 31. Accordingly, the rejection is overcome and should be withdrawn.

Besides not being anticipated by Spies, claim 31 is not rendered obvious by Spies since there is no suggestion to alter Spies so that its interior magnet elements for a based body are arranged laterally to the base body. Accordingly, claim 31 and its dependent claims are patentable over Spies.

#### 5. Claim 35

Claims 35 was rejected under 35 U.S.C. § 102(b) as being anticipated by Spies. Claim 35, as amended, recites a first set of magnetic elements that are arranged laterally next to a first non-magnetizable support and arranged to define a ring and a second set of magnetic elements that are arranged laterally next to a second non-magnetizable support and arranged to define a ring that is offset to and concentric with the ring defined by the first set of magnetic elements. For reasons similar to those given above in Section D.4 with respect to claim 31, claim 35, as amended, is not anticipated by Spies. Accordingly, the rejection has been overcome and should be withdrawn.

Besides not being anticipated by Spies, claim 35 is not rendered obvious by Spies since there is no suggestion to alter Spies so that its interior magnet elements for a based body are arranged laterally to the base body.

#### 6. Claims 36-42

Claims 36-42 was rejected under 35 U.S.C. § 102(b) as being anticipated by Spies.

Claim 36 recites a first set of magnetic elements that are arranged laterally next to a first non-magnetizable support and arranged to define a ring and a second set of magnetic elements that are arranged laterally next to a second non-magnetizable support and arranged to define a ring that is offset to and concentric with the ring defined by the first set of magnetic elements.

For reasons similar to those given above in Section D.4 with respect to claim 31, claim 35, as amended, is not anticipated by Spies. Accordingly, the rejection has been overcome and should be withdrawn.

Besides not being anticipated by Spies, claim 36 is not rendered obvious by Spies since there is no suggestion to alter Spies so that its interior magnet elements for a based body are arranged laterally to the base body.

### E. <u>35 U.S.C. § 103</u>

#### 1. Spies and Schwabe

Claim 8 was rejected under 35 U.S.C § 103 as being obvious in view of Spies and Schwabe. Claim 8 depends indirectly on claim 5. Schwabe does not solve the deficiencies of Spies in that Schwabe does not suggest altering Spies so that its interior magnet elements for a based body are arranged laterally to the base body. Without such suggestion, the rejection should be withdrawn.

#### 2. Spies and Kitaori

Claim 9 was rejected under 35 U.S.C § 103 as being obvious in view of Spies and

Kitaori.<sup>1</sup> Claim 9 depends directly on claim 5. Kitaori does not solve the deficiencies of Spies in that Kitaori does not suggest altering Spies so that its interior magnet elements for a based body are arranged laterally to the base body. Without such suggestion, the rejection should be withdrawn.

Note that claim 9 has been amended so as to depend from claim 5 in order to provide additional coverage for the scale of claim 5. Accordingly, the amendment is not being made for reasons related to patentability as defined in *Festo I*.

#### CONCLUSION

In view of the arguments above, Applicant respectfully submits that all of the pending claims 2, 3, 5-31 and 33-42 are in condition for allowance and seek an early allowance thereof. If for any reason, the Examiner is unable to allow the application in the next Office Action and believes that an interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned attorneys at (312) 321-4200.

Respectfully submitted,

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<sup>&</sup>lt;sup>1</sup> It is noted that the rejection recites Kitaori while the argument makes mention of Noriyuki. For the sake of the present response, Applicants will assume Kitaori is correct. Applicants request clarification in the next Office Action.